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ORIGINAL COMMUNICATIONS.

CONCERNING RECORDS.

[Presented at the Second Annual Meeting of the New England Dental Society, Providence, R. I., Oct. 4, 1883.]

BY GEO. L. PARMELE, M. D., D. M. D., OF HARTFORD, CT.

Prior to October, 1878, I made use of "Waters' Dental Register" to record my operations, and up to that time filled several books; but finding these records inconvenient of reference, I was turning the matter over in my mind with the idea of a simpler and more perfect method, when, almost by accident, while in pursuit of an entirely different object, I was put on the track of my present system through the kindness of my friend, W. I. Fletcher, Esq., of the Watkinson Library of Hartford.

Since that date, October, 1878, I have derived so much comfort and satisfaction from the manner in which I have preserved the records of my practice, that I decided, upon being solicited to present a paper at this meeting, to offer a few words concerning my method of keeping records,—a method which, so far as I can learn, has been adapted to use in the dental office only by myself.

The plan which I have adopted is an adaptation of the card catalogue system now in use in most libraries.

One can readily see how nearly impossible it is to keep *in a book* an absolutely perfect alphabetical list of the books in a library to which constant additions are being made, for sooner or later, no matter how arranged, the titles would require re-arrangement. To obviate this difficulty, a plan known as the "*card catalogue*" was devised at the library of Harvard University, if I be not mistaken, which is now in general use in libraries, and has also been adapted to many other uses.

For use in this catalogue, slips of Bristol board, properly ruled and known to librarians as *standard catalogue cards*, are now to be obtained of dealers in library supplies. The size of the standard card is 5x12½ cm. (2x5 inches), and costs per 1,000, for Bristol board, $1.75; and for best ledger paper, $1.00, when last I purchased any.

The manner in which these cards are used is as follows:

We will suppose that Garretson's Oral Surgery has just been added to a library and is to be catalogued. The librarian would make at least two cards.

1. The Author's Card.

> GARRETSON, James, M. D., D. D. S.,
> A System of Oral Surgery,
> Being a Treatise on the Diseases and Surgery of the Mouth, Jaws, and Associate Parts.
> Third Edition. Philadelphia, 1881.
> No. 538–13.

2. The Subject Card.

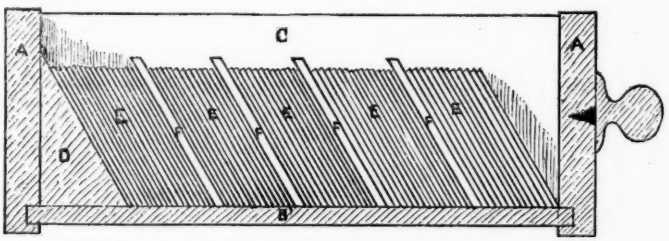
> ORAL SURGERY. A System of,
> Being a Treatise on the Diseases and Surgery of the Mouth, Jaws, and Associate Parts.
> By James Garretson, M. D., D. D. S.
> Third Edition. Philadelphia, 1881.
> No. 538–13.

These cards would then be placed in regular and exact alphabetical order in drawers or boxes designed for the purpose, and so arranged

that the cards are loosely retained at an angle of about forty-five degrees, with the top edges of the cards inclined from you, in order to facilitate consultation.

Now, no matter how many, or what the additions to the library are, the alphabetical arrangement of the catalogue will always be absolutely correct.

For finding at once any desired portion of a card catalogue (letters of the alphabet, subjects, authors, etc.), pieces of wood the size of a standard card, and one-eighth to one quarter of an inch in thickness, and covered with paper, are used in their proper place in the same manner as a card. On the upper edge of this block, the letter, subject, author, or guide-words, whatever they may be, are printed. In place of wood, zinc plates can be used. These plates are one-half a centimeter wider than the catalogue cards. This narrow strip is bent over backwards so that in the ordinary sloping position of the cards it shows plainly. The desired guide-word or letter can be printed on the zinc slips with platinum chloride with a quill pen, or they can be painted white and written on with ink.



This diagram, representing a longitudinal section of a drawer (or box), with the cards in place, will perhaps present the arrangement more clearly. **A, A,** ends of drawer; **B,** the bottom; **C,** the remaining side; **D,** a triangular block of hard wood fastened to end of the draw to give proper slope to the cards; **E, E, E,—F, F, F, F,** wooden or zinc guide-slips to facilitate finding any particular portion of the catalogue.*

To present more clearly the adaptation of this system to office records, and also to illustrate my plan of dental book-keeping, which I believe is peculiar to myself, we will suppose that a patient has just entered my office for the first time and desires my services. It is my usual custom to give an appointment for a thorough examination at such time as is mutually agreeable. We will imagine the patient's name to be Miss Butler. She is given an appointment card as follows :

*This drawing ought to show a triangular block (D) at each end of the drawer.—G. L. P.

Fees for Professional Services will be based upon the character of the operation performed and the time occupied. Except twenty-four hours' notice be given, a charge will be made for appointments not fulfilled.

Miss Butler

Has an Appointment for

Tuesday, March 3, at

10.30 o'clock,

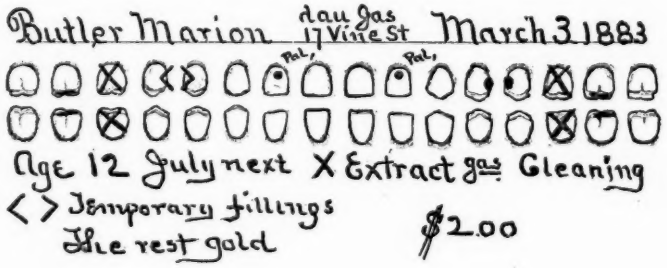
WITH

Geo. L. Parmele, M. D.

17 Haynes St., *HARTFORD, CONN.*

OFFICE HOURS:
9 A. M. to 2 P. M.

An appointment is then entered for that day and hour in the *appointment* or *day-book*, which will be described and explained later. Half-past ten Tuesday, March 3, arrives, and Miss Butler, presuming her to be true to her engagement, arrives also. The examination proceeds, and at the same time, on a *standard card* on which is printed a diagram of the teeth, is recorded the result of the search, which being ended, the *examination card* appears thus:



This card I place in a drawer of my operating cabinet, where is also an examination card for each patient at the present time under treatment. Here it remains during the time that the operations (marked as necessary) are in progress. Upon the completion of each operation, a red mark is made through the corresponding spot

on the examination card indicating that here all is finished. By this habit I am enabled to know at a glance each time the patient arrives just what progress has been made, and do not require to waste valuable time in re-examination. When the treatment is entirely finished (and red marks cover all the black originals), this examination card goes to the *card catalogue record* case or box, in its proper place among the record cards.

Miss Butler, at the end of her examination, retires with another appointment, and furnished with a similar card or paper on which are marked the teeth she is to lose and the address of Dr. Blank, who will administer gas and extract as indicated, which in this mouth are the much-talked-of six-year molars, which I consider in *her particular case*, they being badly carious and the teeth crowded, to be of more value out of the mouth than in. On her departure, two dollars, or whatever the fee may be, is charged on the appointment or day-book opposite her appointment for that day.

As some of you may be wondering why I do not extract these teeth myself, I will explain. I had rather send my patients to an expert in extracting (I don't mean these advertising gas shops) than to do it myself, for the following reasons:

1 (and greatest). Because, notwithstanding the fact that I could do it, if necessary, I had rather cut a man's head off than to extract a tooth.

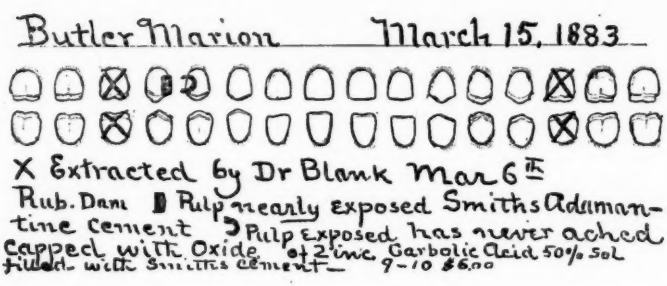
2. Because, in my practice there being little extracting to do, I lack the manipulative ability in this direction which one who constantly extracts acquires.

3. Because, children knowing I never extract teeth, have not that dread of me they otherwise might have.

4. Because it brings a class of patients which I had rather not see.

5. Because patients in the reception room can be more agreeably entertained than by the incidents apt to attend extraction and the administration of anæsthetics.

When Miss Butler comes for her next sitting I inquire the date her teeth were extracted and record it with her operations for the day, which we will suppose are upon the right superior bicuspids, they requiring immediate attention. When she has finished for this sitting a record card is filled out for her as follows, and a charge made on the appointment book of six dollars.


Butler Marion March 15. 1883
X Extracted by Dr Blank Mar 6th
Rub. Dam I Pulp nearly exposed Smiths Adamantine Cement 3 Pulp exposed has never ached Capped with Oxide of Zinc Carbolic Acid 50% Sol filled with Smiths Cement 9-10 $6.00

Whenever a longer record is desired, both sides of the card can be used, and in case of a record of extreme length, a plain standard card could be used to continue the record on, but as a rule one card is enough. These cards I arrange in this way: For instance, Miss Butler's cards would very likely follow after those of a patient named Bushnell; at any rate, they would be in regular alphabetical order, and her individual cards follow each other according to date, so that her examination card bearing date March 3, when put in its place, would come before that operation card dated March 15. The card upon which her last operation is recorded would be followed by those of the next patient in regular alphabetical order; perhaps it might be her sister Ruth; or a patient with another surname, as chance might dictate. Or I might say that the names on cards follow in alphabetical order, and the cards of each individual patient are arranged as to date. When cards of a particular letter accumulate to such an extent as to warrant it, guide-slips might be labeled and put in as sub-divisions. For instance, the sub-divisions of B, for example, would be Ba, Be, Bi, etc. Or where there are many of a particular surname or family name, the family name might be put on a guide-slip, as Butler for example.

My appointment book, on which the above engagements and charges are made, answers much the same purpose as does the day-book or journal in general book-keeping. It is a book about seven and one-half inches long and five inches wide, ruled as a day-book, with the day of the week and month at the top of each page,—the left hand column, where the date is usually placed, being used for hours of appointments. In this book I record appointments, charges to patients, credit cash received, and keep an account of office expenditures. In charging fees in this book, as well as in the ledger,

I only enter the amount, as I can easily get at the particulars by reference to my card records.

This page from the appointment book will present the idea clearly.

Friday, March 13, 1883.

9	Marion Butler,	$ 6	00		
10	John Ives,	10	00		
	Cr. Cash,			$10	00
11.30	Robinson Crusoe,	3	00		
	Cr. Cash,			37	00
12	Thomas Dodd,	5	00		
1	Joe. Jefferson,	6	00		
		$ 30	00		
	Am't brought fwd.	1082	00		
		$1112	00		
8	Veteran C. G. meet.				
	Alcohol lamp,		75		
	Files,	$ 1	25		
	Bill G. E. Hodge,	30	00		
		$ 32	00		
	Brought fwd.	180	00		
		212	00		

It will be seen that Butler, Dodd and Jefferson's charges are to be posted into the ledger;

That Ives paid cash for the service rendered;

That Crusoe has his last sitting and pays like a man the full amount of his bill.

The item, amount brought forward, represents the charges for the year up to this morning which, added to the amount of the day, gives total to date.

The note, "Veteran C. G. meet.," reminds me of a meeting for that evening.

The charges at the bottom are for office expenditures.

The only other book employed by me is a ledger, to which those accounts are posted for which cash is not paid.

Bills for all accounts are sent to patients on the first day of the month following the completion of operations, and these bills give only the *total amount* for professional services rendered. Where there are several in a family, the amount for each individual is given; and in special cases the date and amount of fee for each sitting, but no items other than these are put on the bill.

In case of any misunderstanding as to account rendered, the party is requested to call, when he has access to the card records, where everything is fully explained.

It is my experience that accounts are settled more promptly and with less misunderstanding when they are presented monthly than when long credit be given.

This system of card records has been a great comfort to me for the past five years, as it enables me at a moment's notice to find each and every operation performed for a given patient.

I am now making an index of my old record books on plain standard cards, in the following manner:

JONES, Captain John. May 3, 1870.

1870.
May 9th,
" 16,
" 23,

1871.
June 15,
" 18,

1873.
Jan. 4,
" 8,

These cards, when completed, will be put in the drawers in their proper places with the later records for the same patient, so that when I desire a full life history of any given mouth I can at once find it.

As you see patients from day to day, you can note down any points of interest concerning the case, and if at any future time you desire to make a report of the case you can from these notes write it out in full for publication or other use.

There are several other ways in which these standard cards can be utilized to advantage, among which I will mention

1st. *As records of a certain class of cases.*

Suppose, for example, you desire to keep a record of cases in

which pulps were treated in a certain manner, you could make a card like this:

> PULPS Capped with Oxide of Zinc and a 5% Sol. of Carbolic Acid.
>
> Marion Butler,
> John Fenn.
> Job Pratt.
> Henry Ball.

Then, as cases presented of interest in this particular class, the name of the patient so treated would be added to the list. These special cards can be put in alphabetical order among the other record cards, or a separate drawer or box assigned them.

Should you desire to tabulate the cases after they have accumulated, or write out the results for publication, you have the facts at your immediate command.

2d. *As an Index Rerum.*

Suppose at a meeting like the present, or in your reading general or professional, you are impressed with some thought, subject or fact that you desire to note down, so that you may re-read, think of or perhaps write upon.

Or suppose you are thinking of preparing a paper "when the spirit moves," upon a certain subject, and you come upon points in your reading which may be of use to you for this purpose. Just here you will find these cards, or slips of paper the same size made into pads, for pocket or desk use of particular advantage. On these you can enter your thoughts, extracts, references, etc., starting them with such guide-words as will be most easily thought of when you desire to refer to them.

The following are given as examples:

> TEETH, Curious Items Concerning.—*John. Dent. Mis. VIII., 229.* Fashion in Deformity.—See also *Pop. Sci. Mo., XVII., 721,* where the original article appears, illustrated.

POLISHING INSTRUMENTS.

Cosmos, Vol. IX., 262.

Here is one for a formula you think you may like to try:

NEURALGIA FACIAL.

Ther. Gazette, March 15, 1883.

℞. Bromide Potass. ℥ss.
Fl. Ext. Jamaica Dogwood, ℥ii.
Syrup, q.s. ad. ℥iv.

M. Sig. Teaspoonful every hour until four doses have been given.

When a case presents on which you think you could employ some such prescription to advantage, you know just where to look for it.

The cards of this class (Index Rerum) I keep in a drawer or box by themselves and divide them into classes by the wooden or zinc slips, on which are written such guide-words as these, for example:

ART.
GENEALOGY.
ORAL SCIENCE.
Examples of Subdivisions. { IRREGULARITIES. / OPERATIVE. / PRESCRIPTIONS. / MICROSCOPY.
PHOTOGRAPHY.

Thus you see how easily one can register many references otherwise easily forgotten, and all grouped together so as to be most convenient and suggestive.

In this Index Rerum you can use, if you so desire, cards and slips the size of postal cards. These can be had of dealers in library supplies.

But, I hear you say, to get all the outfit required to keep our records in this way must be expensive, and we can't afford to purchase blocks, zinc slips, cards, cases, etc.

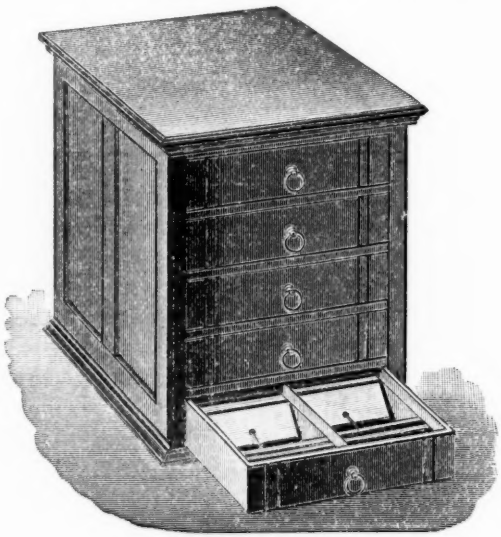
Well, suppose you can't. I say you do not require them, still all these appliances are a comfort to enjoy when your cards demand

them. I have, as I said, kept card records for five years and have not yet a complete outfit such as I hope to purchase soon. All you require are first cards standard size with diagram of teeth upon them. Should you desire to economize, you can omit the diagram and get plain standard cards, using a species of dental short-hand notes to show location of operation, somewhat like this:

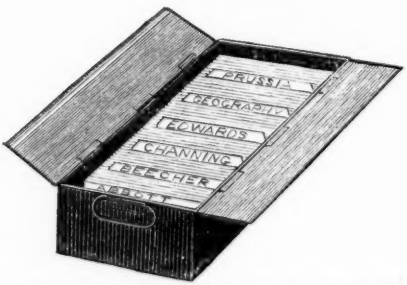
> ROACH, Johnnie. Sept. 9, '83.
> R. S. 2 bi d sur pulp exposed.
> Capped, &c.

Now these cards cost per 1,000, $1.75, and a thousand will go a great ways. Still, if you must cut down the expense still more, use heavy paper in place of cards. Then for your case you can use any box of the right size, say, an envelope box; or partition off a place in a drawer in your desk for them as I have done. Make the triangular slope-block and the wooden slips yourself. Any scroll saw store will furnish you just the stuff to make the latter of. Even the wood in cigar boxes will do. Thus you see the cost is very small. Another way to economize is to use the same card for many operations in the same mouth. This plan, however, I personally dislike. Later, as your cards accumulate (and perhaps your money also), you can go in for the luxuries. At any rate, if you will not keep your records in this way, try the index rerum, and you will never regret it. You had better obtain your standard cards, however, from a regular dealer in these goods as you will find them much more accurately and smoothly cut to the standard size. The Library Bureau, 32 Hawley St., Boston, is the only place I know of, but there may be others. Perhaps you object to the space the cards will occupy, but you will not when you see how small it is. I have just measured, and find that 1,000 standard cards can be accommodated in a space $12\frac{1}{2} \times 5\frac{1}{8} \times 2\frac{1}{4}$ inches, and all my records for five years occupy a space only 40 inches long. Hence, you see it will be a long time before you need one of the cases designed for card catalogues; but should you desire one, they can be had ready-made, of black walnut, finely finished, paneled sides, and nickeled trimmings, for the following prices, which I copy from an old price-list. (They may be less now.)

4-drawer case,	holding	4,000 cards,	. . . . .	$5.00
4 "	"	and complete fittings,	. . . . .	7.70
5 "	"	15,000 cards,	. . . . .	8.50
5 "	"	and complete fittings,	. . . . .	12.75
10 "	"	20,000 cards,	. . . . .	14.00
10 "	"	and complete fittings,	. . . . .	22.25



A Five-Draw Card Case.



A japanned Tray, with cover, holding 500 cards, complete with fittings, $1.75.

If you will step into any large library, the librarian will gladly show you the complete working of the system and give you such information as you may desire to have.

In closing, I will tell you of another plan I find works well in my practice. You all know how easy it is for patients to unwittingly postpone coming for an examination, to have a temporary filling watched, or for any such service, if left to their own remembrance. To aid them in this matter, I arrange with many of my patients to enter their names on a list I keep for the purpose, and to send them word about a certain time that their teeth should be examined or that "such a thing" needs attention. I find they are as a general rule very grateful for such reminders, and it is useful to both of us. This notice, which is printed on what are known as correspondence cards, is as follows:

GEO. L. PARMELE, M. D.,
17 HAYNES ST.,
HARTFORD, CONN.

From 9 A. M. until 2 P. M.

_____

*When you were here*_____

*you wished me to send you an appointment about this time, for*_____

*I have given you*_____*at*_____

o'clock. If not agreeable, please let me know at your earliest convenience.

I am fully aware that the majority of dentists will not care to take the trouble about their records that this system *seems* to require. For them, this plan is not presented, but for men who enjoy thinking and reading, men who devote time and thought to their records and literary pursuits, I present these suggestions, in hopes that some of the ideas thrown out may prove of value.

NOTE.—Since my paper was in type, Mr. Davidson, of the Library Bureau, 32 Hawley street, Boston, has kindly offered to furnish cards similar to mine, with diagrams of teeth on them, at the same price as their regular patterns of standard cards.

The prices given in my paper for cards, cases, &c., which I took from an old catalogue, will be found to vary somewhat from those in a new one (now in the hands of the printer). Still, the changes are so slight as to make no practical difference. It is entirely for the benefit of the profession that I present this system of records, as the only pecuniary interest I have in this matter is that I had to become responsible to the "Bureau" for the sale of twenty thousand cards, in order that the profession might have them at this low price.

G. L. P.

ACONITE.

BY GEO. A. MAXFIELD, D. D. S., HOLYOKE, MASS.

[Read before the Connecticut Valley Dental Society, at Springfield, Mass., Nov. 1883.]

The ancients, who had a very limited knowledge of the mineral poisons, considered aconite as the most deadly thing in nature, and with modern experience it is considered as one of the most subtle of all known poisons. At present, our knowledge of aconite is somewhat limited, yet clinical experience with the drug has reduced it to so manageable a condition as to make it of incalculable value as a therapeutic agent. Its prompt action and the satisfactory results obtained from its use has made it one of the indispensable remedies in dental practice, yet many dentists still hesitate about using such a violent poison. In my own practice, I have found it so valuable as a prophylactic and analgesic that I think it worthy of our attention at this time, so I have prepared this short paper.

Aconite was first employed in medicine by Baron Störch, of Vienna (who published an account of his experiments in 1762), and it was variously employed after that date. In 1813 it had again nearly fallen into disuse, while to-day its use in medical practice is well nigh universal.

There are several different plants of the aconite species, the active principles of which are very nearly allied, but nearly all have been discarded, and the aconitum napellus is the only officinal plant; the root of the Indian aconite or bish is supposed to be more powerful, and is preferred for the manufacture of aconitia. Aconitum napellus is a perennial, indigenous in Europe and Asia, but is cultivated in this country for the sake of its flowers, and is commonly known as wolf's-bane or monk's-hood.

The taste of the root and the leaves is the same—a bitterish and acrid, and after a little while it causes a benumbing and tingling sensation in the mouth and lips. At present, the root only, from which is made a *tincture* and an *extract*, is officinal, and is generally used instead of the leaves. The root is from three to four inches long, tapering, and about three-quarters of an inch across the base. It has been mistaken by many for horse-radish root, though it may be distinguished by its external brown color and the absence of odor when scraped. These mistakes have had serious results: A case is recorded in 1813 of a man dying in two hours after eating one root and part of another. The active principle of the plant is an *alkaloid*, called *aconitia;* was first discovered in 1833 and, when prepared

according to the U. S. Pharmacopea, is a yellowish white powder, and odorless. Since then, another alkaloid has been found in the root, called *aconelline*, which closely resembles *narcotin*, and has led to the belief that they are identical. Aconite as a poison is most intense in the root, less in the seeds, and still less in the leaves before the plant is in blossom. The alkaloid aconitia is a poison of tremendous activity; as little as one-fiftieth of a grain has produced very nearly fatal results. If the dose of aconite is large, death may be immediate; and if given hyperdermically, it may occur in less than one minute. After a poisonous dose has been swallowed, the symptoms occur in from five minutes to half an hour. They are great disturbance of respiration, muscular weakness, and vascular depression. The first thing noticed is a burning or tingling in the throat or in the extremities, which soon spreads over the whole body. The pulse rapidly falls, in a short time becoming very weak and irregular; finally imperceptible. The muscular strength is very much reduced; the respiration is feeble and infrequent; general sensibility is so much benumbed that a marked anæsthesia of the whole surface is perceptible; a cold sweat covers the body; the face is sunken and livid, the eyes often protruding; the eyesight becomes dim and, toward the end, may be lost; burning in the stomach is complained of, and severe vomiting may occur; the voice grows weak and is lost, and death may occur suddenly (especially after some exertion) from syncope. After death no characteristic lesions are found. The only diagnostic symptom in aconite poisoning is the peculiar tingling, which is very characteristic. As yet, there is no decided *antidote* known. As alcohol, ammonia, turpentine, digitalis, and heat antagonize the action of aconite, they are therefore proper remedies to use. In aconite poisoning, first empty the stomach and wash it out well with the stomach pump, then freely administer hot and concentrated alcoholic liquors both by the stomach and rectum, and inject ammonia into the veins. The patient should be kept perfectly quiet, lying on the back, with the feet raised a little higher than the head, and external warmth should be applied. Digitalis has been used hyperdermically with advantage. Laudanum given in drachm doses has been known to restore a patient apparently in a dying condition, while clinical experience already justifies the use of the tincture nux vomica in combination with digitalis.

Aconite produces in man and the lower animals almost identical symptoms, so that conclusions arrived at from experiments upon the

latter are accepted as applicable to the former, and much knowledge of the action of aconite has been gained in this way. The systemic effects of aconite follow within half an hour after its administration. Its action upon the circulation is at once noticeable, causing a reduction in the number and force of the heart beats and lowering the arterial tension.

Its action upon the respiration is also very decided, rendering it very slow—an inspiration being followed immediately by a prolonged expiration. It affects the sensory nerves before the motor, paralyzing first the end organs, next the nerve trunks, and finally the centers of sensation in the cord. The power of voluntary movement continues after the cessation of reflex functions, but this is finally lost. It also increases elimination by the skin and kidneys, and with an increase of fluid discharges there is also an increased discharge of solids. Large medicinal doses produce gastric pains, nausea, and even vomiting. If the gastro intestinal mucous membrane is in an irritable state, aconite impairs the appetite, retards digestion, and causes diarrhœa; while, if the membrane is in its normal condition, aconite increases its secretions and hastens peristaltic movements.

Prolonged contact of aconite upon the skin produces almost the same results as when a drop of the tincture is placed upon the tongue, producing a warm and pungent sensation, followed by intense tingling and numbness. The whole duration of the effect of aconite is about three hours. Aconite is therefore considered to be a direct cardiac poison, and also a sedative to the vasor motor nervous system. It is also a respiratory poison, by its paralyzing action on the muscles of respiration, though the action of the heart generally ceases before respiration. In 1856, so little was known of the action of aconite, that Dr. Geo. B. Wood, in his Materia Medica and Therapeutics, published that year, says: "Care should be taken not to apply the tinctures to abraded, ulcerated or wounded surfaces, or to that of the mucous membranes," and I find that this opinion, erroneous in regard to applying the tincture to the mucous membranes, is still inculcated in a few of the recent works on materia medica. In medical practice, the use of aconite is constantly growing in favor. Dr. Roberts Bartholow, in his work published in 1878, says: "We have no remedy more valuable in erysipelas than aconite, it being decidedly beneficial in facial erysipelas. Neuralgia, when accompanied by arterial excitement and muscular spasm, is also relieved by aconite."

Tonsilitis, acute pharyngitis, and ulceration of the tonsils, are some of the diseases for which he recommends its use.

Aconite is indicated in the early stages of simple inflammatory fevers, in the early stages of pneumonia, and in most acute congestions. When administered at the commencement of the disease, it at once diminishes the force and frequency of the heart's action; moistens the skin with perspiration, thus reducing the temperature to the normal standard, thereby allaying the fever and preventing the spread of any congestion that may have occurred. Aconite also proves valuable in surgical fever. Dr. H. B. Wood says: "One indication that aconite will meet, is to relieve over-excitation of the sensitive nerves, and aconitia endermically applied has proved valuable in neuralgia."

By many other writers it is considered especially valuable for the relief of superficial pains, and of spasms which are not of too severe a type, both by its internal and external administration.

"Dr. Anstic places it among those remedies for neuralgia, which act by locally interrupting the conductivity of a sensory nerve, and thus giving the nerve-center time for rest and self-recovery"; and Dr. Ringer says "that if aconite be likely to give relief to pain, it will do so quickly."

Aconite has recently been recommended by some for its diuretic effects, but clinical experience has not yet established its efficiency in this direction. The doses of aconite are, of the officinal tincture, which is of the strength of six ounces to the pint, from one to five drops. Fleming's tincture is stronger, being ten and one-half ounces to the pint. Dose of the extract is from one-quarter to three-quarters of a grain. Of the alkaloid, aconitia, the dose is $\frac{1}{125}$ of a grain, but on account of its intense activity it is seldom given internally, and in its external use great care should be used.

Aconite, therefore, being so powerful a remedy, and such an active poison, should not be used by any one ignorant of its characteristics, and only used with great care and judgment. In dental practice, in careful hands, the local use of the drug will be attended with the best results. It is very efficient when applied locally to a sensitive or painful part, owing to its contact in a concentrated state with the irritated nerves.

In *inflammation*, we first have an irritation, then congestion, then inflammation, which, if not relieved, is followed by suppuration.

In the early stages of inflammation about a tooth (the cause of the irritation being first removed), aconite is a powerful abortive remedy. Alveolar abscess always results, or is the suppuration following pericementitis or inflammation of the pericementum.

In the treatment of pericementitis, aconite is therefore indicated. In the early stages, apply it to the affected part by moistening a piece of cotton with the tincture and allowing it to remain on the gums for a few minutes. If congestion has occurred, scarify the gums, allowing them to bleed freely, then apply the aconite. According to Waller, who has made very careful experiments, it was found that alkaloids dissolved in chloroform are readily conveyed through the skin into the blood and produce characteristic phenomena; while alcoholic and aqueous solutions are either not at all or very slowly absorbed. For local use, therefore, aconite when combined with chloroform produces the best results. Aconite is very efficient in relieving inflamed pulps and, placed in the pulp cavities, in preventing periosteal inflammation. After filling roots of teeth, aconite should always be applied to the gums over the roots, for it not only relieves soreness caused by the operation, but, by its sedative influence, prevents inflammation of the pericementum. Excellent results are obtained by combining equal parts of chloroform, tincture iodine, and aconite tincture.

Another combination, of tincture aconite two drachms, tincture iodine four drachms, and chloroform one ounce, is an excellent application in incipient alveolar abscess. Aconite is often useful to relieve the after pains of extraction, and as I have found it of great service in relieving the soreness or uncomfortable sensation caused by the rubber dam clamps and ligatures, I always apply it after removing the dam.

Fleming's tincture, which is about a saturated tincture, is the best for dental use, but it must always be borne in mind that it is a medicine of intense activity, as only three drops have been known to produce alarming results.

I have frequently found patients very susceptible to its influence, the moistened cotton when applied to the gums causing an unpleasant sense of constriction of the fauces, continuing over an hour. For such persons, I prefer to use the officinal tincture.

In the treatment of alveolar abscess, when it is desirable to save the tooth, and when suppuration cannot be prevented, and there is more or less accompanying fever, the internal use of aconite is indicated. It may be given in from one to two-drop doses, of the officinal tincture (always in water) every twenty or thirty minutes until eight or ten drops have been taken, or until there is a marked change in the pulse and temperature.

A HISTORY OF DENTISTRY.

BY GEORGE H. PERINE, D. D. S., NEW YORK.

[Continued from page 345, Vol. 2.]

England and Her Early Practitioners and Writers.

While to France has been very justly ascribed the credit of originating some important professional improvements, and contributing much to the literature of the past century, it must be acknowledged that England was meanwhile by no means inactive, and that to her efforts toward the advancement of the dental art is in a measure due its present elevated position. We find that in 1618 Helkiah Cook, styled "a Doctor in Physick," published in London a book entitled Μικροκοσμοτραοια, which he termed a "Description of the Body of Man, together with the Controversies of Figures thereto belonging, collected and translated out of all the best authors of Anatomy." The writer has devoted five chapters of his work to the description of the teeth and dental organs, and much of his information, and many of his theories were extracted from the writings of Aristotle, Hippocrates, Galen, and other ancient contributors, to whom we have referred. The style of the book is peculiar, and it advances few if any original ideas or improved theories. Prior to the work above alluded to, appeared "The Birth of Mankinde; or, The Woman's Booke, set forth in English by Thomas Raynalde, Phisition, and by him corrected and augmented. . . Imprinted at London by Richard Watkins, . . 1568." In one portion of this work instructions are given to enable the reader "to keepe and preserve the teeth cleane." It is doubtful whether the specialty of dentistry was practiced in England as a distinct branch of the healing art before the middle of the seventeenth century. If it was, we fail to find any record of the fact. The first reference to it as an independent specialty we meet with in the diary of the Rev. John Ward, who was Vicar of Stratford-upon-Avon from 1648 to 1679. It reads as follows: "Upon a sign board about fleet Bridge this is written—'Here lives Peter de la Roch and George Goslin, both which and no others are sworn operators to the King's teeth.'"

To Nathaniel Hyghmore the profession is indebted for the discovery of the diseases of the antrum. From his description of that structure, which appeared in one of his works, it derived its name, *i. e.*, Antrum Hyghmore. He was the first to discover that the alveolars penetrated into the cavity, and that they were only separated by a thin scale. He

was born in Fordingbridge, 1613, and was educated at Trinity College, Oxford, from which he graduated with the degree of M. D. in 1642. He located in Sherburn, and there practiced his profession. His writings appeared between 1650 and 1657, and though they were not numerous, their value was fully appreciated by the practitioners of his time and those of a later period. He died in the year 1685.

It was during the seventeenth century that science throughout Europe began to make its way to the foreground. Societies of learned men were established, whose experiments led to many valuable results. In England, the writings of Lord Bacon stimulated thought, and taught the men of his time that study and persistent investigation were the keys to the rich repositories of science, and soon the profession of medicine began to receive a liberal share of attention and to assume proportions far beyond its former limits. Thus we find, in 1770, Thomas Berdmore endeavoring to systematize the practice of dental surgery by calling attention to the deformities and disorders of the teeth and gums, through the medium of his able pen. Although his views were somewhat crude, compared with those of to-day, his writings nevertheless exhibited an extensive practical knowledge of the subjects of which they treated. He was the dentist to George III., and died in 1789. The improvements he made in the construction and adaptation of artificial teeth were many, and it was through his activity and ability that the specialty was raised from its comparatively primitive state to a standard of sufficient prominence to attract the attention of John Hunter, whose work, entitled "The Natural History of the Human Teeth, Explaining the Use, Formation, Growth and Diseases," appeared in London in 1771. A second part of the work bore the title: "A Practical Treatise on the Diseases of the Teeth and the Consequences of Them," and appeared in 1778. This work was the first which comprised a full and complete view of the anatomy of the teeth. It also entered into their physiology and pathology to a greater degree, and with sounder judgment and more accurate observation, than any previous production. If it contains defects which render it of little service at the present day, it should be borne in mind that at the time it was written the specialty of dentistry was in its infancy; indeed, comparatively little was known of the physiology of the teeth.

Hunter was perhaps the first to realize the importance of the careful study of the mysteries of nature, and even those neglected members received from him, consequently, especial attention. John Hunter

was born at Long Calderwood, about eight miles from Glascow, Scotland, Feb. 13, 1728. Although his early education had been somewhat neglected, he began, at the age of twenty, to feel the importance of knowledge, and accordingly he went to London to assist his brother, Dr. Wm. Hunter, in his anatomical inquiries. Bringing to his task the aid of a fully matured brain and a well developed frame, he was particularly successful in his first efforts at anatomy, and already gave promise of future excellence. His progress in his chosen branch was so rapid that he was very soon established as an under teacher to guide the students in their labors. At this period, Cheseldea had the reputation of being the best surgeon in England, or on the Continent, and to him young Hunter went to take up the study of surgery, for which his intimate practical knowledge of anatomy so well fitted him. Here too he displayed great aptitude and began to shadow forth the great abilities which afterwards made his name so famous.

In 1757 Hunter entered St. Bartholomew's as a surgeon's pupil under Pott, who was then rising rapidly in his profession. From the changes which Pott sought to make in the practice of surgery, Hunter doubtless learned much to aid him afterwards.

In 1753 he entered at St. Mary's, Oxford, as Gentleman Commoner; but the following year found him again in London, and he soon after entered as surgeon's pupil at St. George's.

In 1759 he was attacked with inflammation of the lungs, and was obliged to leave London for his health. He was then appointed Staff Surgeon, and sailed from England in 1761. His first practice with gun-shot wounds was at the siege of Belle Isle. He returned home with the army in 1763. Being now without means, and with no income but his half pay, his life was a laborious one of persevering exertion, mingled with many years of dispute and controversy; for personally he is said to have been rough, almost boorish, and very excitable. To increase his income, he established a school of anatomy and operative surgery, where for many years he delivered lectures upon these subjects; he was not, however, very successful, for his school never exceeded twenty pupils. He devoted his time, his energies, and all his spare money to the collection and preparation of anatomical specimens, and to the advancement of truth. To aid him in this, he obtained possession, by permission, of all animals that died in any of the zoological collections of the country. Not satisfied with this, he sought to study more closely all living subjects—plants

and insects, as well as animals. For this purpose, he purchased a small lot of land about two miles from London, where he erected a a building, in which he spent his leisure time studying nature. About this time, also, he had an opportunity to study the reunion of divided tendons, having ruptured the tendon of his own leg while dancing.

In 1767 Hunter was elected Fellow of the Royal Society, the first public recognition that was made of his services as an investigator; and the next year he was elected surgeon of St. George's hospital. This, of course, had the effect of bringing him more pupils, among whom were Jeuner, Guy and Sir Everard Home. In the autumn of 1779 he began to deliver a course of lectures upon surgery before the pupils of St. George's hospital. As a lecturer, Hunter was never popular, and apparently had no natural gift for public speaking; his language was terse and forcible, but inelegant and coarse, while his delivery was unpleasant. His dislike to facing an audience amounted to a disease, and he was obliged to quiet his nerves with laudanum when about to appear before his class. He read several valuable papers before the Royal Society from time to time. He died October 16, 1795, while attending a meeting of the Governors of St. George's hospital.

[To be continued.]

THE FOLLY OF EXTRACTING TEETH.

BY HYMAN ROSA, M. D. S.

[Read before the Third District Dental Society, New York.]

Mr. President and Brethren:

The subject I have chosen for a few remarks is one that should appeal most emphatically to the minds and consciences of *all* honorable people, but particularly to the assembled genius and excellence before me; and, though I may seemingly have chosen a "hobby," I hope to prove a competent rider, or be thrown completely.

History informs us that in the year 300 B. C., Eristratus deposited in the temple of the Delphian Apollo a leaden odontologue, which we should call a tooth-drawer (forceps) "to prove that only those teeth ought to be removed which are loose or relaxed, and for which a leaden instrument will suffice," which in itself, even before the infancy of dentistry, was an argument against the wholesale destruction of nature's most priceless organs.

This was probably the only kind of instrument employed in the

extraction of teeth until the invention of Garengeot in the early part of the eighteenth century. As the world grew wiser and greater, the need of a more available instrument for removing teeth became manifest, and the key of Garengeot displaced the rude and imperfect forceps, and no doubt the extracting of teeth began in earnest. For about fifty years the fun continued, and there was not found a country doctor, a city barber, or a traveling dentist, whose saddle bags did not contain the slaughtering turnkey of Garengeot.

The writer well remembers the experience of a Christmas day, twenty years ago when, almost distracted with toothache, he applied to the country doctor for relief. He must needs first go to the barn where he kept his turnkey; then after whetting his jack-knife on his boot-leg, he lanced the gum. A silk pocket handkerchief of goodly dimensions was wrapped around the lever and the murderous key applied to my refractory molar. A dextrous twist of the wrist, and one side lifted—it seemed like one-half of my youthful cranium—then, leisurely removing the key, and changing the hook to fit the other side, he made a final effort and dislodged the tooth, all for twenty-five cents, and no questions asked.

My brethren, think you there would be as many teeth extracted at the present day, if our patients were obliged to become the victims of a like experience?

Until about the year 1830, this was the prevailing mode of extracting *molar teeth*, as the forceps of those days were so rude and awkward as to render their use on any but the anterior teeth very uncertain and even dangerous.

At the present day, however, there is such a diversity of forms, and such perfect adaptation to the requirements of each individual case, that the extracting of teeth has unfortunately become a household word and, when done in connection with nitrous oxide gas, "a glorious revelation!"

When we consider the ravages made by the neglect and untimely sacrifice of the teeth of our American people—a nation leading the world in culture and civilization, a nation of dentists and dental colleges—it is surprising that so little has been written or spoken upon this subject to educate them to a higher degree of appreciation of the usefulness and beauty of the natural teeth over the artificial; to cultivate a habit of careful and thorough watchfulness; to create in the minds of children a spirit of pride and jealousy which shall prompt them to neglect or sacrifice their teeth no sooner than they

would their fingers or their eyes: to have the extraction of teeth the exception rather than the rule, and to brand every dentist and dental association who are concerned in the wholesale destruction of the natural teeth as maliciously mercenary, and subject them to the contempt and disgust of all right-minded individuals.

It is estimated that 20,000,000 teeth are extracted and 3,000,000 artificial sets constructed annually,—what an unnecessary sacrifice, when we consider the vast number which are never replaced and the poor substitutes that are made. The time has been when the surgeon thought he was the best who cut off most fingers and toes, arms and legs, and penetrated nearest to the vital parts of the human frame with merciless cold steel. That day is now past, and the best educated surgeon is he who saves a limb, and restores to usefulness without mutilation. Has not the time come for us to show a parallel improvement in dental surgery? It does not seem quite the thing for men, who have received the liberal education now demanded of dentists, to take their orders from their patients, who are not wise about their denture any how, and whose little stock of common sense is apt to take wings before the pangs of an exposed nerve. No physician would be dictated to by a patient as to whether a finger should be lanced to the bone, and poulticed for a felon, or cut off at the first joint, and so make a speedy end to the throbbing agony peculiar to that species of inflammation.

And, brethren, it seems to me that the dentist should decide for the patient who has been kept awake all night with a demon of a molar, whether the torture should be ended with a forceps, or whether a more mild and conservative treatment, even though extending the period of pain, should be entered upon. It is true, that as the physician finds people who always want to be purged, as Hercules purged the Augean stables by turning the course of the river full into them, and never think they get full value for their money unless the testimony of their bowels is full and copious, so we find patients who would apparently enjoy the dentist's chair much better if each tooth drawn had its roots hooked, or were riveted by exostosis, so that the history of the operation might be handed down as an example of fortitude worthy the emulation of generations yet unborn. It was some such soul as this who despised the dentist that charged him fifty cents for popping a tooth out "*just as easy*," and lauded the blacksmith, who only charged him a shilling, for dragging him all around the shop. It is hard to explain to such minds the value of conserving

the teeth. It would probably be of no use to tell him that his natural teeth would masticate his food much better, and save him from the fangs of that internal wolf, called dyspepsia. Perhaps such people are born into the world to suffer, and only by suffering can ideas penetrate their brains. But is there not another class, a much larger class than we have imagined—a class that we must search for to find out, who may be wrought upon, by a proper presentation of the case, to spare themselves and their teeth?

Where there is not personal vanity to work upon in the patient, there should be some common-sense to appeal to, and the dentist, however skillful he may be in mechanical dentistry, should yet pride himself more in his skill in appealing to the owner to spare the innocents, whose place he can fill with lifeless porcelain, so as to deceive the eye of the most observing. Would that I were a poet, to write, not "Woodman, spare that tree," but "Dentist, spare that tooth."

If it be asked whether the author of this essay is inclined to run down mechanical-dentistry, or to do away with it, I must answer that there must always be a plenitude of cases where mechanical dentistry, and it alone, will fill the bill. But the danger at the present time is, that skill in doctoring sensitive teeth, in preparing cavities, in filling teeth, will be lost altogether. The gas-bag, forceps, and the vulcanizer are ready oftenest in the hands of the general practitioner. We are becoming a class of mechanics rather than a profession.

It is in this vein of thought that I have prepared these words for your thoughts to-day. Let us then, brethren of the Third District Dental Society, awake to a renewed appreciation of our duties as dentists. Let us be more steadfast in the conservative department of our specialty, and by precept and example fearlessly do our best to promote such a healthy reaction in the minds of our patients that "pulling teeth" will be a by-word and a reproach among all thoughtful and intelligent individuals.

SOMETHING FOR DENTAL CHEMISTS.

BY CHAS. MAYR.

The action of hydrochloric acid upon the teeth has been the subject of some dispute. Some have claimed that when a tooth is dissolved in hydrochloric acid no decomposition of the phosphate of lime in the tooth takes place. Every dentist, who is educated in chemistry, can repeat the following experiments. If he dissolves a tooth in

muriatic acid the equation is this, supposing as practically always the case an excess of muriatic acid; it will help the following explanation:

$$\underset{\text{Tooth}}{P_2O_8Ca_3} + \underset{\text{Muriatic Acid.}}{12HCl} = \underset{\text{Phosphoric Acid.}}{2(PO_4H_3)} + \underset{\text{Chloride of Calcium.}}{3CaCl_2} + \underset{\text{Excess of Muriatic Acid.}}{6ClH.}$$

We have therefore in solution chloride of calcium and phosphoric acid, not considering less important substances like carbonate of lime, magnesia, etc. To prove that really decomposition of phosphate of lime has taken place is very easy. We add two perfectly neutral substances, neither of which would decompose the phosphate of lime: first, acetate of ammonia, and then oxalate of ammonia. The acetate of ammonia serves to transform the free hydrochloric acid into ammonium chloride and free acetic acid; the oxalate of ammonia, to throw down all the lime in solution. We obtain a white precipitate containing all the lime in the tooth if we did not warm.

The chemical equation, somewhat simplified, is:

1. After adding $\overline{Ac}Amm$:

$$\underset{\text{Phosphoric Acid.}}{2(PO_4H_3)} + \underset{\text{Calcium Chloride.}}{3(CaCl_2)} + \underset{\text{Muriatic Acid.}}{6(HCl)} + \underset{\text{Ammonium Acetate.}}{12Am\overline{Ac}} = \underset{\text{Phosphoric Acid.}}{2(PO_4H_3)} + \underset{\text{Calcium Acetate.}}{3(Ca\overline{Ac}_2)} + \underset{\text{Ammonium Chloride.}}{12Am\ Cl} + \underset{\text{Acetic Acid.}}{6\overline{Ac}}$$

2. After adding $\overline{Ox}Amm_2$ (oxalate of ammonia) written in a simplified form:

$$\underset{\text{Phosphoric Acid.}}{2(PO_4H_3)} + \underset{\text{Calcium Acetate.}}{3(Ca\overline{Ac}_2)} + \underset{\text{Ammonium Chloride.}}{12AmmCl} + \underset{\text{Acetic Acid.}}{6\overline{Ac}} + \underset{\text{Ammonium Oxalate.}}{3(\overline{Ox}Amm_2)} = \underset{\text{Phosphoric Acid.}}{2(PO_4H_3)} + \underset{\text{Calcium Oxalate.}}{3(Ca\overline{Ox})} + \underset{\text{Ammonium Chloride.}}{12AmmCl} + \underset{\text{Acetic Acid.}}{6\overline{Ac}} + 6Amm\overline{Ac}.$$

3. If we now evaporate the liquid by heating to dull redness, the phosphoric acid will remain behind, pure and free from any lime. Neither of these neutral salts would have decomposed the phosphate of lime. Even oxalic acid alone would have done so very incompletely; but I think the proof is conclusive that the muriatic acid not only dissolved the lime, but completely decomposed it.

On the right side of our equation we have nothing that is not volatile after filtering off the insoluble $Ca\overline{Ox}$, except the phosphoric acid.

EDITORIAL.

BARNUM'S RUBBER DAM.

During the last month or two we have received several communications relative to the claim of Dr. W. T. La Roche, as set forth in a paper which he read before the First District Dental Society, of New York, on the 6th of November last. We were urged to publish these in our December number, but declined to do so, hoping that the *journals*, at least, would unite in refusing to give the matter publicity. In this we were disappointed. Consequently, we reluctantly admit a letter, which may be found under the heading of *Correspondence*, giving some of the facts in the case. We have also endeavored to ascertain the full merits of the controversy and shall express ourselves without bias, but decidedly. In so doing, we fully believe we are but expressing the universal sentiment of the profession at large.

We confess to considerable surprise that the chairman of this society, or any other, should have permitted and that the society itself should have good-naturedly allowed the time to be wasted while Dr. La Roche undertook to prove that he used rubber dam in dental operations prior to its use by Dr. S. C. Barnum. We fail to discover any reason for bringing this subject at this late day to the attention of any body of dentists, or of the profession at large. Even if Dr. La Roche, by affidavits and other evidence, is able to convince some of the truth of his claim, it is of no consequence; he does not make it appear that the profession is in the least indebted to him for it. According to his own story, he kept the knowledge of this use of rubber dam within his own office for his own benefit and that of his students for about *seven years*, before the profession in 1864 received the suggestion of its value *from Dr. Barnum*, through Dr. Clowes. Since then, some nineteen years more have passed. The great invention, received at first with hesitation and doubt, after a while began to be appreciated at its true value; Dr. Barnum became famous, receiving many thanks and testimonials from the profession in Europe and America, and for years his name was associated with the rubber in the periodical advertisements for its sale, in the words, "Introduced by Dr. S. C. Barnum." During all this time, until three or four years ago, no one heard any other name than his mentioned in connection with this invention. Dr. La Roche then first, we are informed, made the claim that he knew of and used rubber for a coffer dam prior to

Barnum. Those who heard of it might well have hesitated whether the story might be most charitably regarded as due to some vagary of a recently awakened Rip Van Winkle, or as worthy of credence, which carried with it the conviction of the meanness of a man who knew of such a thing and kept it in his own office, and who, so far as appears, would have kept it there still if he could. He repeated the strange story, with the stranger addition that he told Barnum of the rubber and its use, long before the latter made it known. These statements were very naturally received with doubt, and some even intimated entire unbelief. This so wrought upon the soul of the claimant that, to defend his veracity, he made the public statement with affidavits, not including, however, his claim of telling Barnum, to which reference has been made.

Dr. Barnum's health is probably too much impaired to permit him to publicly defend himself, even if he were not restrained from any such attempt by native diffidence, and we are, on this account, the more moved by a sense of duty to notice Dr. La Roche's assertions.

Dr. Barnum was a student of dentistry in the office of Dr. J. W. Clowes, of New York, from 1858 to 1862, and during the latter year went to Monticello, N. Y., to practice, where he remained two years, returning to New York in April, 1864, to act as Dr. Clowes' assistant. Immediately after his arrival, he informed Dr. Clowes of his recent discovery of a means to keep teeth dry during operations upon them, which was entirely different and far superior to any means then in vogue. The quickly following explanation and demonstration so delighted Dr. Clowes that the too modest Barnum was persuaded to present rubber dam to the dental profession, through the former, at a dental society meeting held in June of the same year, in New York city. Much of what has followed we all know, but there are a few points worthy of consideration in the claim that has been made. Dr. La Roche claims to have invented the rubber dam in 1857. If he did, what of it? During seven years, no dentist outside of his own office heard of it. If it is true, of what interest is the fact except as an example of selfishness? But he has repeatedly made the claim, in conversation, that he showed it to Barnum! Let us look at this. Barnum was a student in Dr. Clowes' office and, for him, went two or three times, between 1858 and 1862, to Dr. La Roche's office in relation to the construction of artificial dentures by the latter, for Dr. Clowes; and it is alleged that upon one of these occasions the information was imparted. Is it not remarkable that during seven years

not another person outside that office was let into the secret? that no professional acquaintance was so favored? This young man was the only exception. Then this information, it is to be supposed, was treasured up by the secretive Barnum for two years or more. He did not reveal it to his uncle, Dr. Clowes, during his studentship, but went away to Monticello, to come back after two years with a story of struggling with difficulties and a final surmounting of them by the invention, of which he quickly tells and readily consents to give to the profession. There must have been a wonderful change in Dr. Barnum in those two years if this be true. *He denies* that he ever received any such information. He refuses to admit the possibility of his having been favored, as is claimed, and then of his forgetting it. These are the facts, as we understand them. It is indeed a remarkable story.

Dr. La Roche has made his public statement, we are told, to defend his veracity. We would gently suggest that never since he learned to talk could he have done anything which will cause it to be so much doubted. Those who give credence to his statements, excuse him for keeping it, we are informed, because "he did not think much of the rubber." They cannot then give him credit for either genius or generosity. Young Barnum thought enough of it to claim it as an invention, and Dr. Clowes thought so much of it that it was generously given to the profession.

Blind Samson of old pulled down the heathen temple and perished with his Philistine tormentors, whom he wished to destroy; Dr. La Roche, in attempting to upset the foundations of the temple of Dr. Barnum's fame, has done nothing more than injure himself so as to make an unpleasant revelation of his "in'ards."

[The *Missouri Dental Journal*, Oct. 1870, contains a letter from Dr. Clowes to Dr. Geo. H. Cushing, relating some of the above facts.]

BICKFORD'S DENTAL MOUTH PROP.

Our advertising columns describe this new and unique device. Every operator will find it very helpful, both at the chair and in the extracting room. It is neat, strong, occupies but little space, and possesses many points of superiority over any other prop we have seen. The price is within the compass of any one.

THE JOURNALS.

The October number of the *Missouri Dental Journal* reprints from the *Weekly Medical Review* an article on "Artificial Respiration," giving the method discovered (?) by Dr. A. McDaniel of Alabama. We believe the Doctor claims too much for his method. That the capacity of the thorax is greater while the patient is in an erect than when in a recumbent position, probably everybody will admit. The Doctor's method is based on that fact. He professes to produce artificial respiration by "merely moving the patient from a forward inclination of forty-five degrees to the erect position, and back again." Every upward and backward movement produces an inspiration, and every forward and downward movement an expiration, and the two together constitute the respiratory act, which may be prolonged at will. He further says: "Any one will find that if he leans forward from the erect position to an inclination of say forty-five degrees, he will mechanically and involuntarily perform inspiration. He cannot by any power of volition prevent the result, or reverse it." To become satisfied of the incorrectness of this statement, one has but to go through the motions recommended, and exercise volition against the tendency. We have tried the experiment ourselves, and upon a number of friends, and though the *tendency* is to expire as you move forward and downward, and to inspire as you pass back to the erect position, yet it is readily overcome by slight effort. Possibly the tendency may be sufficiently strong to produce artificial respiration when the patient is in a state of collapse, but the tendency of the tongue to fall back into the fauces must be very difficult to control in Dr. McDaniel's method. Friction and artificial warmth are rightly considered valuable aids in restoring respiration, especially where the circulation is also suspended or very much retarded, as is very likely to be the case. The ease and convenience with which these aids may be used in the "Sylvester method," as compared with the McDaniel method, is apparent to anybody who will compare the two. On the whole, we should expect much better results from Sylvester's method (which we think preferable to Hall's, unless possibly in cases of drowning, where water is to be gotten rid of). Too many methods are confusing, and while we look upon Dr. McDaniel's method as ingenious, and based on a correct apprehension of anatomical structure and physiological function, we think it lacks positiveness, and presents difficulties which do not inhere in either the Marshall Hall or Sylvester methods. If every dentist would arm himself for an

emergency of asphyxia, let him familiarize himself with *one good method*, both by study of its theory and by practicing the movements on a friend. Do not get two or three methods confused. Adopt one method, learning what the others are, if you desire; but remember that multiplicity of council is likely to produce confusion and hesitation. A clear head and a prompt and steady hand are needed in all cases calling for artificial respiration.

The *Independent Practitioner* of October contains an excellent article by Dr. W. C. Barrett, of Buffalo, on "An Examination of the Teeth of Certain Prehistoric American Races." The article is very elaborate and highly instructive. We are afraid that those persons who ascribe all failings to modern civilization, will derive not the faintest trace of comfort from this article. Dr. Barrett dispels all illusion in that direction; before the faintest dawn of civilization had even appeared in American skies, there were diseases of the teeth enough to keep the same proportion of dentists alive. Even the grand bugbear, syphilis, was then unknown. "If an exchange of teeth between our generation and the one living long ago could be made, we are afraid we would make a bad bargain." Those fogies who believe in the wickedness of civilization, are mostly those who consciously or unconsciously delight in original sin, depravity of human nature and the like. A man cannot be a fogy in one sense and an advanced thinker in the other; either of the two is not worth much, if he tries to be both, and every little detail in which it is possible to disprove the notions of these men will prove valuable for the general enlightenment of mankind. Dr. Barrett gave a slight extract of his ideas at the Springfield meeting, in June last, but we are glad he has elaborated a little more the ideas he threw out into an independent paper.

Dr. Trueman publishes an able article on the Screw as used in regulating teeth.

Another very able paper is published by Dr. Frank Abbott, of New York, on the "Minute Anatomy of Human Teeth." It is a very good synopsis of the latest discoveries in this line, given by one who is himself prominent in original research.

Dr. Atkinson was at the meeting of the New Jersey State Dental Society, July 19, '83, and, as usual, things were lively. Speaking of the folly of depriving wheat of its nutritive elements for the purpose of having it whiter, he says the following excellent things: "It is hardly fair to state that starch is a detrimental agent, inasmuch as it must be digested in the human body, until it has been converted into

glucose." "Anything that is capable of acting on the living human body has either to help or arrest the nutritive changes that are going on and may be, according to the demand and necessities of the human body, either a food, a poison, or a remedy." "The outer husk of the berry of the wheat may be neither detrimental or useless."

The meeting of the Penn. State Dental Society treated as the subject of one of its sessions, Iodoform. Dr. Trueman recommends mixing the iodoform to the amount of one twentieth of a grain for a tooth with a solution of carbolic acid; Dr. Darby speaks very favorably of the application of iodoform over exposed pulps and his experience is favorable. A case was related where iodoform quickly allayed the pains resulting from piles.

The October number of the *Microscope* lies before us. It is a periodical appearing at Ann Arbor, Michigan. Dr. Kellicott gives an account of the proceedings of the American Society of Microscopists. Very often the efforts of microscopists are wasted because of the lack of system in what the microscopist is about to investigate. The microscope taken as a self end is nothing but a plaything; it only becomes valuable when mixed with brains and system.

Dr. A. M. Ross publishes an excellent article on Sensitive Dentine. It is written in a very pleasing style, and is well worth the reading.

Fortunately, after much hard treatment, another copy of *Le Progres Dentaire* has reached us. It is the September number. There is given a continuous translation of the book of Alfred Coleman, and if the French readers cut out the corresponding pages from the periodical, and paste them together, they will have a gratis copy of Coleman's book in French.

THANKS.

"The NEW ENGLAND JOURNAL OF DENTISTRY, which has heretofore been edited and published impersonally, in its last number announces its syndicate and publishes the names of its editors. It has a number of accessions to its corps of collaborators and will enter upon its third volume with brighter prospects than ever. The *Independent Practitioner* acknowledges the compliment paid in adopting its method of publication and wishes the NEW ENGLAND JOURNAL abundant success. Good as it has always been in the past, we shall expect that it will be better in the future."—*Independent Practitioner.*

Thanks, Dr. Barrett. The "method," however, is *our* patent. We have simply expanded our original method—not adopted a new one.

The *Independent Practitioner* (December) has a very thorough article by that excellent and famous investigator, Dr. W. D. Miller, of Berlin. This gentleman, whose investigating skill cannot be too highly praised, states in a very able manner the way we ought to investigate teeth. He gives the five following methods:

First. The structure and chemical composition of the teeth, and the nature of the agents and reagents by which they are surrounded in the human mouth, are carefully considered, so that we may be able to form an intelligent conclusion as to the probable results produced by their action upon each other.

Second. Carious teeth, both in the fresh and dry state, are in thick sections, subjected to a careful *macro*scopical examination.

Third. The anatomical changes produced by caries in the structure of the tooth are studied on *micro*scopical sections of the various tissues of the tooth.

Fourth. The exact chemical changes which have taken place in the diseased tissues are determined by proper chemical analyses.

Fifth. Pieces of sound tooth tissue are subjected to conditions as similar as possible to those found in the human mouth, for the purpose of artificially producing the phenomena of caries.

The fifth method we should consider slightly dangerous because it contains the very dangerous restriction "as similar as possible." The danger of not knowing when we have reached the greatest possible resemblance is so great that all experiments in this line do not seem to us consistent with the otherwise strictly scientific turn of mind of Dr. Miller. There is missing the great, the all overwhelming influence of the surroundings in which the tooth is placed in the mouth. Such experiments are very much what used to be termed "tooth-pickling." We cannot quite agree with Dr. Miller in what he says in these sentences:

"Up to within a few months the conviction had become pretty general that the first stage of dental caries (if not the whole process) consisted in a decalcification of the tissue of the tooth by various acids. Later, however, a reaction arose in America, the object of which was to replace acids by an agent of a parasitical nature, but no attempt was made to prove that this agent had in reality the power of producing the effects which had previously been attributed to acids. On the other hand, the advocates of the parasitical theory of decay distinctly affirm that no acid is necessary, and that no decalcification takes place in the process of caries. This is the fundamental idea, and at the same time the fundamental error of the germ theory."

It is now two years ago that, at a meeting of the Connecticut Valley Club, the opinion that parasites of a bacterial nature produce

decay without necessarily requiring the action of acids, was treated. This possibility was only thrown out, so to speak, as a proposition, either to be proved or disproved. Since that time a great number of experiments have been made, by Dr. Miller especially. And now, after this proposition of bacterial action without acids was put up two years ago, Dr. Miller thinks it has only been published a short time. The difference between Dr. Miller's views and those then broached by our friends and us seems to us to lie in the difference of the meaning of decay. No one will deny that acids produced by fermentation are extremely helpful to decay; but what was claimed then is, that decay properly is a putrefactive process, requiring for its action certain putrefactive bacteria. It may even be said that the investigations of Dr. Miller have rendered it doubtful if the putrefactive bacteria may attack a tooth without the aid of lower organisms producing organic acids out of the particles of food left about the teeth. But this point was never disputed. At least, it was then put up as suggestion that the simple erosion produced by an acid, even if that acid should have originated from fermentation, would not yet be decay. The suggestion as to the attack of bacteria upon a sound tooth has never been as strongly insisted upon as Dr. Miller seems to suppose. It was only proposed as a ground to work upon, and it seems to have taken a good deal of time to reach this investigator, since he now quotes it as a recent view. It was made long before his experiments, and was put up more for a fighting ground than anything else. We might almost, to set at ease the combativeness of investigators, say that it appears very doubtful to us that putrefactive germs can work directly into defective enamel or tooth substance; but this would be giving up a very slight and unimportant phase of our opinions about decay. The only point clearly and well defined, put forth by us and still maintained, is the same for which Dr. Miller fights, namely, that the action which produces decay is, essentially, one of germs, using this term not only for germs of putrefaction but also for germs of fermentation. In this shape the theory has been maintained and defended by the NEW ENGLAND JOURNAL OF DENTISTRY, by Dr. F. Y. Clark and others long before the experiments of Dr. Miller. We may have been wrong about details, but in this we most distinctly and on many occasions disclaimed any committal on our part. Dr. Miller's experiments have only convinced us more firmly than ever before of the same proposition. He has done a great deal of detail work, but that detail work has not overthrown the work which we then did on a

merely fighting basis. The analyses that were made at the instigation of the defenders of this theory give almost exactly the same results as those of Dr. Miller. We only had to emphasize certain points not yet admitted, namely, that there is still very much lime left in what is called decayed masses. The idea in this country was then that there were no lime-salts left in the decayed mass, and the tendency was to consider decay as nothing but a grossly chemical process. This view we combatted and still combat, and the whole profession testifies indirectly in favor of our theory by using carbolic acid in the treatment and manipulation of decay. We can say, without opposition, that carbolic acid does not neutralize the acid but works against fermentative and putrefactive changes, both of which we now know are due to micro-organisms. The passages,—"They simply show what, until recently, had so long been looked upon as a settled fact, and what must at once suggest itself to every man who has ever excavated a carious tooth, that a tolerably thorough decalcification of the dentine takes place in caries; that the extent of the decalcification decreases as the distance below the surface increases (it could not well be otherwise); that on the border of the normal dentine the decalcification is comparatively slight, and that the same characteristics are presented by dentine softened in a mixture of saliva with various articles of food, as by carious dentine,"—might have with only a slight modification, been written by us some two years ago. The only point of difference to us seems to be the explaining of results. The following propositions as results of investigations of fermentation may be interesting to many of our readers.

First. The contact of saliva with amylaceous or saccharine food, (not to speak of nitrogenous food), or a solution of sugar or starch in saliva, kept at body temperature, invariably gives rise in four or five hours to a strong acid reaction, due to the generation of an organic acid.

Second. There must consequently be in the human mouth a constant though variable generation of acid, because of the impossibility of keeping the mouth perfectly free from food and from solutions of amyloid in saliva, which penetrate cracks, pits and fissures, or are held by capillary attraction between the surfaces of teeth in contact, and there become acid by fermentation.

Third. The degree of acidity depends somewhat upon the length of time which has elapsed since partaking of food, and will be found greatest on rising in the morning.

Fourth. A cavity of decay in which saccharine or amylaceous food has remained for some hours, must and will be found, always and without exception, to have an acid reaction.

Fifth. The extent to which any tooth suffers from the action of the acid depends upon its density and structure, but more particularly upon the perfection of the enamel and the protection of the neck of the tooth by healthy gums. What we might call the perfect tooth would resist indefinitely the same acid to which a tooth of opposite character would succumb in a few weeks.

Sixth. An occasional possible absence of an acid reaction in a cavity of decay is no indication that acid has not participated in the production of the cavity. Little or no value can be attached to tests of the saliva alone.

Seventh. Any general or special disorder or condition of the system which results in the withdrawal of lime-salts from a tooth, or in a lowering of its density, or in a weakening of the chemical union between the organic and inorganic matter of the tooth, renders it more liable to decay.

Eighth. Strong acid and corroding substances brought but momentarily into the human mouth, may give rise to lesions of the enamel at points where the ordinary agents alone could never have begun.

Ninth. All the *macro*scopical appearances and characteristics of caries may be produced with the greatest exactness *out* of the mouth, simply by subjecting teeth to those acid mixtures which are constantly to be found *in* the mouth.

Tenth. The superficial layers of carious dentine undergo an almost, if not absolutely complete decalcification, which decreases as we approach the normal dentine. The same is true of dentine decalcified in saliva and bread.

Eleventh. The destruction of the organic constituents follows (not precedes) the decalcification, and is evidently for the most part to be ascribed to the action of fungi.

Twelfth. The fungi found in the human mouth do not participate *directly* in the process of decalcification. The exact part which they perform in the production of an acid reaction requires further investigation.

Thirteenth. The fungi produce the most manifold anatomical changes in the softened dentine, resulting in the complete obliteration of the structure and final disappearance of the tissue in a mass of debris and fungi.

Fourteenth. The invasion of the micro-organisms is always preceded by the extraction of the lime-salts.

Fifteenth. The destruction of the tissue remaining after decalcification is effected almost wholly by fungi alone.

Sixteenth. Inflammation can hardly be looked upon as a very important factor in caries of the teeth.

Seventeenth. Caries of the enamel is purely chemical, the decalcification resulting at once in the complete dissolution of the tissue.

Eighteenth. Caries of cement runs a course analogous to caries of dentine, a softening of the tissue by acids, and following this its

destruction by fungi; a slight inflammatory action on the part of the living matter in the corpuscles is not to be excluded.

That a microscopist like Dr. Miller should consider macroscopic appearances of such value is slightly astonishing. They are so apt to mislead us and not quite admissible at a time where, as Dr. Miller himself has proved by his experiments, the microscope is many degrees beyond any macroscopical research.

M.

THE DENTAL ART AS VIEWED BY A FRENCHMAN, DR. GASPARD GUILLOT.

Dentistry, until not long ago, was looked at in France as on a level with the professions of barbers, chiropodists, wart-doctors and veterinary surgeons. Dr. Guillot says that in France even aeronauts practice dentistry. To impress his readers with the necessity of doing something for dentistry, he gives the following synopsis of the present status of dentistry all over the civilized world. We think it is worth reading. As a genuine Frenchman, he says: The superiority of the Americans would not remain long, if rote would not spread itself so much in France, and if all spirit of enterprise were not crushed out by the burden of governmental supervision.

"The United States were first in founding dental colleges, and England soon followed. This nation lately commenced to raise the dental profession by requiring of the students entering into the dental school a scientific foundation very different from that formerly demanded. The title of D. D. S. is given to the graduates of the colleges of the United States; that of L. D. S. to those of old England. The considerable material in these institutions and the diplomas given by the faculty are the cause that these colleges send out well-trained graduates, capable and armed for the fight; hence, their superiority, which would not shine long, if rote did not spread itself so much in France, and if all spirit of enterprise was not crushed under the weight of governmental supervision.

Belgium is somewhat like France, at least, as we believe, without regulations. The women as well as the men exercise this profession there, as in France, without control. Holland, her neighbor, required diplomas, but finding these insufficient, she actually demands that all professionals in the art of dentistry be Doctors in Medicine.

A number of Israelites, who practiced the art of dentistry in that country, not feeling themselves capable of attaining this height, went

to Belgium, who perhaps will send them to us, if she comes to imitate her neighbor.

Spain, the country so far behind in the opinion of our politicians, compels her dentists for many years to pass severe examinations before boards of health composed of Doctors of Medicine.

Russia imitates Spain in this.

In Italy, we believe, the examinations are optional, but we dare not affirm it. At any rate, the dental art has taken such a development that it soon will be regulated.

Germany and Austria, without possessing what we would properly call dental colleges, have in many of their universities Professors of Odontology, whose lectures are well attended. The examinations to practice the profession of a dentist are very severe, and the candidates with the title of "Practischer Zahnarzt" (Dental Physician), must have a great amount of knowledge and experience to be admitted by the commission to practice the profession.

Switzerland, the little country of twenty-two cantons, is worthy of being mentioned, specially in regard to the examinations which are demanded from dentists. As a general rule, no one can practice the profession of dentist in any canton, without, in the first place, having passed a satisfactory examination before the health commissioners of the canton who grant to him this right. The examinations are not the same for all the cantons, and this is to be regretted. Some are theoretical and practical at the same time, others simply theoretical; hence, of more or less value to the candidate. For this reason, it is also difficult for a dentist to practice in whatever canton he pleases. Certain cantons admit the equality of the examinations; others reject them. However that may be, the principle is good. It would evidently be preferable that, like the candidates for Doctor of Medicine, they should pass a federal examination which would confer on them the right of practicing in whatever part of Switzerland they may choose. Switzerland is endowed with a dental college, supported by the state, and situated in the canton of Geneva. We cannot say what its future may be, but we can say, at present, that it loses for us its title of college for the single reason that it makes an unqualified competition to the dentists of the country. We will not speak of the faculty, among which there is but one single dentist, capable, that is true. Since we graduated from the dental college of Geneva, we have had a number of pupils which, after passing good examinations, have practiced dentistry.

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France is thus almost isolated in this, as many other things, among the European nations, and is outside of that scientific orchestra in which she might easily enter and soon become the leader (!) Four years ago two societies, having for their purpose the defense of professional interests, were formed at Paris: The Odontological Association (societé syndicale odontologique), and the Dentists' Club (Cercle des Dentists). Each one had a publication of its own; one was the Gazette Odontologique, the other soon died. These two societies did not agree, and failed to utilize the excellent resources for the establishment of a dental college. The Dentists' Club founded a weak school and polyclinic, which is now in its third year. The two years required there from the pupils do not seem to us sufficient. All such schools in France do not prosper unless under governmental protection. One might object to us that in the United States one may be D. D. S. in two years and even in six months, as we know. Is that exactly a raising of the profession? And how many of the hosts of "American dentists," who swarm all over the globe, are truly capable? Few, very few. We know that from a good source; the deserving and solid men remain in their own country where they are highly honored and consulted.* The other association is trying to establish dental chairs in all the medical colleges. The present practitioners in France are greatly opposed to all dental schools.—*From Le Progres Dentaire, Sept. '83.*

INTERESTING.

Dr. Miller of Berlin writes to Dr. Barrett recently, as follows:

"I have discovered and successfully cultivated a fungus *always* present in the human mouth and in carious dentine, whose development is, under proper conditions (such as are constantly found in the mouth), always accompanied by the production of a strong acid. I have also determined the conditions favorable and unfavorable to its development and have nearly finished the analysis of its acid. To ascertain this I have made over *three hundred* experiments and cultures. I am very hopeful that this will furnish a key to the solution of the whole problem."

But what if he should thus prove that "micro-organisms" *are* "the essential factor in dental caries" after all. We are glad that the "bug" that carries an acid bottle is discovered at last. We were sure he was there. But, hold a moment! Which is *primary*, the acid or the "bug?"

*As the opinion of the author we only translate it without indorsing or contradicting it.

MASSACHUSETTS DENTAL SOCIETY.

The nineteenth annual meeting of this society was held at Codman & Shurtleff's hall, Boston, Dec. 13 and 14. The attendance was large and an excellent programme was successfully carried out. The several sessions were called to order promptly by the president, Dr. F. Searle, of Springfield, the first of which was entirely devoted to routine business. In subsequent sessions, papers on the following subjects were read: *Reminiscences*, by Dr. J. T. Codman; *Regulation of Devitalized Teeth*, by Dr. S. F. Ham; *Modes of Operating*, by Prof. Thos. Fillebrown; *Early Treatment of the Teeth*, by Dr. G. F. Eames; *Salivary Glands*, by Dr. E. S. Niles; *Oral Deformities*, by Dr. H. A. Baker; *A Review*, by Dr. D. M. Clapp; *Brown's System of Crown Setting*, by Dr. E. Parmly Brown.

The sessions closed with a clinic—Contour Approximal Fillings without Previous Separation—by Dr. Brown. With the exception of Dr. Baker's, the papers were followed by very little discussion. In future numbers we hope to print most, if not all, these papers and bring out the chief points of interest in the discussions.

The officers elected for the ensuing year are as follows, viz: President, Dr. D. M. Clapp, Boston; First Vice-President, Dr. J. F. Adams, Worcester; Second Vice-President, Dr. S. G. Stevens, Lynn. Secretary, Dr. W. E. Page, Boston. Treasurer, Dr. E. Page, Charlestown. Librarian, Dr. R. R. Andrews, Cambridge. Executive Committee, Drs. G. C. Ainsworth, Boston; Leon Rideout, Lynn; J. S. Hurlbut, Springfield; H. A. Baker, Boston; E. F. Whitman, Boston Highlands.

Dr. J. A. McClelland, in behalf of the Chrolithion Dental Co., presented a new material for mounting artificial teeth, called the "Rose-pearl Base." This material resembles very much in appearance celluloid, but the claim is made that its color is much less liable to become impaired by use. We understand that it is soon to be placed upon the market.

There were many features of interest in connection with this meeting which marked it as one of the best in the history of the society. Many of the papers read were noticeably of a highly advanced order, clearly showing that this society has among its members not a few who may be justly classed as representative of the progressive spirit of the times. Time, place, etc., of the next semi-annual meeting was referred to the executive committee.

EARLY TREATMENT OF THE TEETH.

The Southern Dental Journal, published at Atlanta, Ga., is fortunate in having a contributor, Mrs. M. W. J., who is writing a series of "Letters from a Mother to a Mother, on the Formation, Growth and Care of the Teeth." We are pleased to know that these "letters" are to appear in book form. They are very nearly the ideal of what every dentist wants to distribute among his patients, especially the *mothers*. We can scarcely conceive of a better way to "educate the public" regarding the importance and methods of a proper care of the teeth. They go back of the brush, silk, tooth powder, washes, etc. They deal with teeth in the intraüterine life, *the* important time to commence the "care of the teeth."

Next month we shall publish a paper read before the Massachusetts Dental Society, at its late meeting in Boston, by G. F. Eames, M. D., D. D. S., on "*Early Treatment of the Teeth*," and expect that this will be followed by a series of papers by the same author, who has made this important subject a special study. We bespeak for them a careful reading.

Will our old subscribers kindly remit *promptly* for 1884?

We are sorry to learn that the *Missouri Dental Journal* will cease to exist with the December number. This number (Dec.) closes the fifteenth volume, and it has long been known as one of our best journals. That the "West" should let it die "for want of support" does not speak so well for that section of country as we could wish.

Dr. Claudius, of Grenoble, France, furnishes a good point to tame unruly children. He advises us to say, "Now, my little darling, please sit still and keep your little mouth very pleasantly open, otherwise it takes too much time, and as I charge in my operations in proportion of time, it will cost much, and your dear parents will lose unnecessary money." Even the weakest parents, when they hear that speech, muster up courage and exert their authority, and out goes the tooth. The author thinks that a tariff for dentists might be a good thing in Europe.

A professor in Würzburg (Germany), has made the first resection of a part of the stomach, because of cancer. The operation, in which a considerable portion of the stomach was removed, has been crowned with success.

Dr. Cheize describes a simple method of producing local anæsthesia. In a case of ingrowing toe-nail of the big toe, he had no apparatus near and immediate operation was required. A piece of cloth was moistened with ether and put on the toe; he then blew with a common hand-bellows a current of air over the cloth, and the cold produced by the evaporating ether soon produced complete insensibility. After repeating this manipulation three times, the nail could be removed without the slightest pain to the patient. This method might be applied to opening boils, etc.

SOCIETIES.

The second annual Commencement Exercises of the Dental Department of the University of California were held with those of the Medical Department at the Baldwin Theatre, San Francisco, Cal., Tuesday evening, Nov. 13, 1883.

The literary exercises were as follows:

Address on behalf of the Medical Department, by Prof. R. B. Kane, M. D., M. R. C. S. I.

Address on behalf of the Dental Department, by Prof. C. L. Goddard, A. M., D. D. S.

Valedictory on behalf of the graduating class of the Dental Department, by W. E. Price.

Conferring the Degree of Doctor of Medicine, by President of University, W. T. Reid, A. M.

Conferring the Degree of Doctor of Dental Surgery, by President of University, W. T. Reid, A. M.

Administering the Hippocratic Oath to the graduates of the Medical Department, by Prof. R. Beverly Cole, A. M., M. D., M. R. C. S., Eng., Chairman of Faculty of Medicine.

Address on behalf of the Alumni Association of the Dental Department, by G. W. Sichel, M. D., D. D. S.

The following candidates received the degree of Doctor of Dental Surgery: John Nelson Blood, Charles Boxton, Maria A. Burch, Edwin Overton Cochrane, Russell Hopkins Cool, Milton Francis Gabbs, William Edmund Price.

The number of matriculates for the session was twenty-six.

The next session will begin Feb. 1, 1884, and continue till the last of October, 1884.

S. W. DENNIS, M. D.,
Dean of the Faculty.

CONNECTICUT VALLEY DENTAL SOCIETY.

The following officers were elected at the annual meeting held in Springfield, Mass., November last:

President, A. M. Ross; First Vice-President, G. L. Parmele; Second Vice-President, S. B. Bartholomew. Secretary, W. F. Andrews; Assistant Secretary, G. A. Maxfield. Treasurer, W. H. Jones. Executive Committee—Geo. A. Maxfield, F. W. Williams and A. F. Davenport. Section Committees—Section 1, E. S. Niles; Section 2, E. O. Wilbur; Section 3, C. Fones; Section 4, L. D. Shepard; Section 5, E. A. Stebbins.

The committees are appointed by the president.

W. F. ANDREWS, *Sec'y.*

CORRESPONDENCE.

HONOR TO WHOM HONOR IS DUE.

As soon as an invention or discovery is proved by the test of time to be valuable, rival claimants to the honor of having been the first to use it are apt to appear. By some, Morse is charged with having stolen his idea which led to the introduction of the electric telegraph from a gentleman who was a fellow passenger with him on a westbound ocean steamer. We know, too, that the first use of the anæsthetics, nitrous oxide, ether and chloroform, was claimed by no less than three different men, and many other examples of rival claimants to valuable inventions must occur to all minds. For years the name of Barnum has been so closely associated with the rubber dam as its discoverer and introducer, that the practitioner of dentistry has supposed that the honor of that very valuable discovery, at least, was

correctly placed. Therefore, it was a sort of bomb-shell which Dr. W. T. La Roche threw into the First District Dental Society camp, at their regular meeting on Tuesday, Nov. 6th, when he read a paper in which he claimed that he both used and demonstrated to others the use of the rubber dam as early as 1858, substantiating his claims by sworn statements of patients and students who were either operated upon or present during such operations. To some members of the society it seems strange that Dr. La Roche did not then introduce the dam to the profession at large, and that he should have waited till this very late day before claiming to be its discoverer. One member, who had an office very near, even charged him with meanness for not having been liberal enough to tell his near neighbors, at least, of the great discovery. We all remember, however, that the dentist of 1858 was not the dentist of to-day; if he had a good thing he stroked his chin and kept still about it; and, moreover, Dr. La Roche was not living in New York city at that time, seldom if ever attended dental meetings, and proves by a certificate from a physician of good standing that his eyes were under treatment for many months, during which time he read nothing and knew not of Dr. Barnum's claims until they had long been made. It is natural that Dr. La Roche should wish to place himself right before the profession and get the credit due him, and he possesses such a high standing as an operator and gentleman that his assertions, late as they are, must meet with respectful consideration. Still, admitting all that Dr. La Roche claims, Dr. Barnum was the real introducer of the rubber dam, and to his ingenuity and generous kindness in revealing his great discovery we owe what we owe.

D.

MONTHLY LIST OF PATENTS.

Inventions relating to Dentistry, and Surgical Interests, bearing date Nov. 20, 1883. Reported expressly for this journal by Louis Bagger & Co., mechanical experts and solicitors of patents, Washington, D. C.

287,761—Dental engine hand-piece. W. A. Johnston of Clifton, A. W. Browne of Westfield, N. Y., E. Starr and J. W. Gilbert of Philadelphia, Penn.

287,642—Medicated soap. J. J. Dillard, Eureka Springs, Ark.

288,499—Dental engine hand-piece. S. R. Screven, Philadelphia, Penn.